

of Mr. Dobson's new worm would imagine that the generic term *Pterygodermatites* was due to Wedl; but with the several lines there given the student is not reminded, as he is in the English work, that *Rictularia* is an older generic term.

The references are often incomplete; compare that of Günther's 'Introduction to the Study of Fishes,' an account of which is, *horrescimus referentes*, given in a third language (Italian), Orley's Monograph of the Anguillulidæ, or Balfour and Sedgwick's memoir on the Head-kidney of the Embryo Chick (pt. iv. p. 186).

A reference to the last paper, which is omitted seemingly from the English 'Record,' reminds us that Mr. Rye's coadjutors fail somewhat in their appreciation of anatomical works; "les ganglions sont confondus" is not to be translated by the "ganglia are confounded" (Ins. p. 2). Neither Mr. Kirby nor Mr. Ridley refer to their illustrious countryman's epoch-making work on comparative embryology; medical helminthology might, we should think, be more fully treated; the researches of Scott and Balfour on the lower Pisces might have had a word of explanation; a few words on the freshwater Medusa would not have been unacceptable; and something of general importance could surely have been found in Prof. Martin Duncan's fine work on Sind corals.

On the whole, however, we would recommend the working zoologist to put his trust in the English 'Record;' and we shall perhaps be pardoned if we suggest to the Naples staff that, having done the chief work for which they were called into existence, that of awakening the Englishman to a sense of the necessity of early appearance, they will reconsider the advisability of producing a work hasty and imperfect in execution, cumbrous for employment, uncertain in its accuracy, and ill-proportioned in its design.

Proceedings of the Bristol Naturalists' Society. New series, vol. iii. part ii. (1880). 8vo. Pp. 83-174. Also, new series, vol. ii. (1877-8-9). *Flora [recent] of the Bristol Coal-field.* Edited by J. W. WHITE. Part I. Thalamifloræ. 8vo, 40 pages. Bristol, 1881.

As usual, this publication of the Bristol Naturalists is full of good matter. Dr. S. P. Thompson gives a concise and suggestive treatise on hearing with two ears, and describes also a new phonautograph. The breathing of aquatic larvæ, the local Lepidoptera, and the Fungi are special subjects; also the boulders of the Bromsgrove district. Notes on recent investigations on the course of storms, by Dr. Burden; on the preparation of a local Flora, by J. W. White; Mr. C. Jeck's optimistic view of "Darwinism"; and Mr. Leipner's "Naturalist's Ramble in Guernsey," are all worthy of attention.

The first instalment of a new local flora, made by the personal exertions of the Society, and edited by the "Honorary Secretary of

the Botanical Section," is issued with this part. It contains the Thalamiflorals. Other portions will follow year by year. The next will give the Calyciflorals; the third, the Coralliflorals; the fourth, Apetalous Plants; and the fifth and last, the Endogens, Gymnosperms, and Vascular Cryptogams.

Proceedings and Transactions of the Nova-Scotian Institute of Natural Science of Halifax, Nova Scotia. Vol. v. part iii. for 1880-81. Svo. Pp. 223-315. Halifax, N.S., 1881.

CONTINUATIONS of geological research in Nova Scotia, by the Rev. Dr. D. Honeyman, Professor of Geology in Dalhousie College, and detailed descriptions of lievrite and of the trap-minerals of Nova Scotia, by Edwin Gilpin, Government Inspector of Mines, and some Geological Notes by A. Cameron and Alfred Hare, constitute a goodly portion of this part. In Botany, Dr. Somers treats of the Fungi and Mosses of the country; and Mr. A. W. Mackay enumerates the Lichens. The birds of prey have an interesting memoir by Dr. J. B. Gilpin, an acute observer. He states that the Rev. Mr. Wainwright, a missionary in Labrador, with good eye and hand, shot an eagle rising eight feet from the ground with a fisherman's child in its claws, and dropped it so cleverly as not to hurt its living prey. Dr. Gilpin also gives a lively account of the dwellings of the Muskrat and Beaver of Nova Scotia. The ice-storm of January 1881 is noted by H. S. Poole, F.G.S., and Mr. R. Morrow, among the miscellaneous materials of this useful and interesting number of the Nova-Scotian Institute's Proceedings.

MISCELLANEOUS.

On the Origin of the Spermatozooids in the Hydroids.

By M. A. DE VARENNE.

IN a preceding note I had the honour of presenting to the Academy a summary of my researches upon the origin of the ovum in the Hydroids*; and I now wish to communicate the results to which my observations on the origin of the male sexual products in the same group have led me.

In the species that I have observed the mother cells of the spermatozooids appear not in the gonophores, medusoid buds, or Medusæ, as has hitherto been supposed, but in the tissues of the colony itself, in what Allman calls the *coenosarc*. Weismann has lately described the same phenomenon in the genus *Plumularia*; but he thinks that it occurs with the spermatie cells only in this genus. I regret that I cannot adopt his opinion.

* See 'Annals,' October 1881, vol. viii. p. 321.